CLAIMS

WHAT IS CLAIMED IS:

- 1 1. A method of accessing a dataset, comprising
- 2 intercepting an open request to access a dataset, the open request being associated
- with a first data structure that specifies a first access method;
- 4 replacing the first data structure with a second data structure that specifies a
- 5 second access method which is different from the first access method; and
- 6 accessing the dataset in accordance with the second access method of the second
- 7 data structure.
- 1 2. The method of claim 1 wherein the open request specifies that the dataset is to be
- 2 opened for reading, and said accessing reads from the dataset in accordance with the
- 3 second access method.
- 1 3. The method of claim 1 wherein the open request that specifies that the dataset is
- 2 to be opened for writing, and said accessing writes to the dataset in accordance with the
- 3 second access method.
- 1 4. The method of claim 1 wherein the first access method is a basic direct access
- 2 method and the second access method is a sequential access method.
- 1 5. The method of claim 1 wherein the dataset is an extended format physical
- 2 sequential dataset.
- 1 6. The method of claim 1 further comprising:
- 2 specifying an access interface module to access the dataset, wherein said
- 3 accessing is performed by the access interface module.

- 1 7. The method of claim 1 wherein the first data structure is a first data control block,
- and the second data structure is a second data control block.
- 1 8. The method of claim 1 wherein the second data structure contains an address of a
- 2 shadow access interface module, and said accessing also invokes the shadow access
- 3 interface module, the shadow access interface module receiving the address of the second
- 4 data structure, and
- 5 invoking, by the shadow access interface module, a supported access module to
- 6 access the dataset in accordance with the second access method.
- 1 9. The method of claim 1 further comprising:
- 2 qualifying the dataset to determine whether the first data structure is to be
- 3 replaced; and
- 4 when the first data structure is to be replaced, issuing another dataset open request
- 5 to open the dataset using the second access method.
- 1 10. An apparatus for accessing a dataset, comprising:
- a processor; and
- a memory storing one or more instructions to be executed by the processor that:
- 4 intercepts an open request to access a dataset, the open request being
- associated with a first data structure that specifies a first access method;
- 6 replaces the first data structure with a second data structure that specifies a
- 7 second access method which is different from the first access method; and
- 8 accesses the dataset in accordance with the second access method of the
- 9 second data structure.
- 1 11. The apparatus of claim 10 wherein the open request specifies that the dataset is to
- 2 be opened for reading, and said one or more instructions also read from the dataset in
- 3 accordance with the second access method.

- 1 12. The apparatus of claim 10 wherein the open request specifies that the dataset is to
- 2 be opened for writing, and said one or more instructions also write to the dataset in
- 3 accordance with the second access method.
- 1 13. The apparatus of claim 10 wherein the first access method is a basic direct access
- 2 method and the second access method is a sequential access method.
- 1 14. The apparatus of claim 10 wherein the dataset is an extended format physical
- 2 sequential dataset.
- 1 15. The apparatus of claim 10 wherein the first data structure is a first data control
- 2 block, and the second data structure is a second data control block.
- 1 16. The apparatus of claim 10, wherein said one or more instructions also specify an
- 2 access interface module to access the dataset, the access interface module comprising
- 3 said one or more instructions to access the dataset.
- 1 17. The apparatus of claim 10 wherein the second data structure contains an address
- 2 of a shadow access interface module, and said one or more instructions that access also
- 3 invoke the shadow access interface module, the shadow access interface module
- 4 receiving the address of the second data structure, and said one or more instructions also
- 5 invoke, by the shadow access interface module, a supported access module to access the
- 6 dataset in accordance with the second access method.
- 1 18. The apparatus of claim 10, said one or more instructions also:
- qualify the dataset to determine whether the first data structure is to be replaced;
- 2 and
- when the first data structure is to be replaced, issue another dataset open request
- 4 to open the dataset using the second access method.

- 1 19. An article of manufacture comprising a computer program usable medium
- 2 embodying one or more instructions executable by a computer for performing a method
- 3 of accessing a dataset, the method comprising:
- 4 intercepting an open request to access a dataset, the open request being associated
- 5 with a first data structure that specifies a first access method;
- 6 replacing the first data structure with a second data structure that specifies a
- 7 second access method which is different from the first access method; and
- 8 accessing the dataset in accordance with the second access method of the second
- 9 data structure.
- 1 20. The article of manufacture of claim 19 wherein the open request specifies that the
- dataset is to be opened for reading, and said accessing reads from the dataset in
- 3 accordance with the second access method.
- 1 21. The article of manufacture of claim 19 wherein the open request specifies that the
- 2 dataset is to be opened for writing, and said accessing writes to the dataset in accordance
- 3 with the second access method.
- 1 22. The article of manufacture of claim 19 wherein the first access method is a basic
- direct access method and the second access method is a sequential access method.
 - 1 23. The article of manufacture of claim 19 wherein the dataset is an extended format
 - 2 physical sequential dataset.
 - 1 24. The article of manufacture of claim 19 wherein the first data structure is a first
 - data control block and the second data structure is a second data control block.
 - 1 25. The article of manufacture of claim 19, said method further comprising:
 - 2 specifying an access interface module to access the dataset, wherein said
 - 3 accessing is performed by the access interface module.

- 1 26. The article of manufacture of claim 19 wherein the second data structure contains
- an address of a shadow access interface module, and said accessing also invokes the
- 3 shadow access interface module, the shadow access interface module receiving the
- 4 address of the second data structure, said method further comprising:
- 5 invoking, by the shadow access interface module, an operating system access
- 6 module to access the dataset in accordance with the second access method.
- 1 27. The article of manufacture of claim 19, said method further comprising:
- 2 qualifying the dataset to determine whether the first data structure is to be
- 3 replaced; and
- 4 when the first data structure is to be replaced, issuing another dataset open request
- 5 to open the dataset using the second access method.
- 1 28. An article of manufacture comprising a computer program usable medium
- 2 embodying one or more instructions executable by a computer for performing a method
- 3 of accessing a dataset, the method comprising:
- 4 intercepting an open request to access a dataset, the open request being associated
- 5 with a first data control block that specifies an unsupported access method for the dataset;
- 6 in response to said intercepting, invoking an open screen module, the open screen
- 7 module issuing a second open request to access the dataset using the supported access
- 8 method specified in the second data control block, and receive an address of a supported
- 9 access module, and said open screen module replacing the first data control block with a
- second data control block that specifies the supported access method which is different
- from the unsupported access method, the second data control block also comprising an
- 12 address of a shadow access interface module; and
- invoking the shadow access interface module, using the address of the supported
- access module, in accordance with the second data control block, the shadow access
- interface module invoking the supported access module using the address of the
- supported access module, to access the dataset in accordance with the second access
- 17 method.

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- 1 29. The article of manufacture of claim 28 wherein the open request specifies that the
- 2 dataset is to be opened for reading, and said accessing reads from the dataset in
- 3 accordance with the second access method.
- 1 30. The article of manufacture of claim 28 wherein the open request specifies that the
- 2 dataset is to be opened for writing, and said accessing writes to the dataset in accordance
- 3 with the second access method.
- 1 31. The article of manufacture of claim 28, said method further comprising:
- 2 qualifying, by the open screen module, the dataset to determine whether the first
- 3 data control block is to be replaced.
- 1 32. The article of manufacture of claim 28 wherein said qualifying further comprises:
- determining whether the dataset is of a type that is not supported by the first
- 3 access method.
- 1 33. The article of manufacture of claim 28 further comprising:
- 2 intercepting a close request to close the dataset; and
- 3 executing a close screen module to close the dataset.
- 1 34. The article of manufacture of claim 28 wherein the unsupported access method is
- 2 a basic direct access method, and the supported access method is a sequential access
- 3 method.
- 1 35. The article of manufacture of claim 28 wherein the dataset is an extended format
- 2 physical sequential dataset.